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The Three-Step Process of Self-Objectification: Potential Implications for Adolescents' Body Consciousness During Sexual Activity

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Abstract

A three-wave panel study with intervals of six months was conducted to examine the relationships between internalization of appearance ideals, body surveillance, valuing appearance over competence, and body consciousness during sexual activity among 238 Belgian adolescents who had engaged in sexual intercourse. Consistent with predictions, structural equation modeling indicated that greater internalization of appearance ideals at Wave 1 contributed to increased body surveillance and valuing appearance over competence at Wave 2. Body surveillance at Wave 2 and internalization at Wave 1 predicted higher body consciousness during sexual activity at Wave 3. Gender did not moderate these results, as model paths were similar in strength for girls and boys. These results further implicate the consequences of internalizing sociocultural practices that objectify boys and girls regarding adolescents' initial sexual experiences.

Keywords: objectification theory, self-objectification, adolescence, sexuality, internalization of appearance ideals

The Three-Step Process of Self-Objectification: Potential Implications for Adolescents' Body Consciousness During Sexual Activity

Within objectification theory, Fredrickson and Roberts (1997) created the basis for a field of research centered on *sexual objectification*, i.e., the cultural practice of treating girls and women as sexual bodies while ignoring their personalities. This practice is encountered in social interactions and during media exposure and may trigger a tendency for girls and women to objectify their own body, referred to as *self-objectification*. Self-objectification is theorized to contribute to maladaptive outcomes, such as depression, eating disorders, and sexual dysfunction (Fredrickson & Roberts, 1997). This study proposes a model that organizes relationships between self-objectification and adolescents' sexual activity.

The Three-Step Process of Self-Objectification

Although objectification theory originally addressed females' experiences of sexual objectification (Fredrickson & Roberts, 1997), recent literature (Slater & Tiggemann, 2010; Vandenbosch & Eggermont, 2013) has argued that sexual objectification also exists among males. In boys and girls alike, sexual objectification may trigger a chain of psychological events that we call "the three-step process of self-objectification." This process begins with the internalization of appearance ideals. When adolescents experience sexual objectification (e.g., during media exposure), they may adopt the promoted ideals of thinness (for women) and muscularity (for men) as one's own appearance ideals (Thompson, van den Berg, Roehrig, Guarda, & Heinberg, 2003). This internalization may subsequently cause adolescents to consider appearance-oriented body attributes, such as weight, as more important than competence-oriented body attributes, such as physical fitness (Noll & Fredrickson, 1998). Both internalization and the valuing of appearance over competence, which are cognitive components, are expected to influence a behavioral component, body surveillance, described as the habitual monitoring of one's appearance (McKinley & Hyde,

1996; Moradi & Huang, 2008). Cross-sectional studies by Vandenbosch and Eggermont (2012, 2013) among girls and boys supported these relationships. The first objective of this study was to test this three-step process using longitudinal data.

Body Consciousness During Sexual Activity

Studies have warned about the influence of self-objectification on individuals' sexual functioning (e.g., Claudat, Warren, & Durette, 2012). A central issue in decreased sexual functioning is *body consciousness during sexual activity*, the extent to which an individual focuses on his or her appearance during sexual activity (Wiederman, 2000). Objectification theory suggests that body consciousness during sexual activity may be caused by self-objectification because self-objectification prompts individuals to adopt an external (i.e., appearance-based) rather than internal focus on their body, and thereby prohibits a warm, affectionate intimacy during sexual interactions (Bay-Chen, Livingston, & Fava, 2012; Fredrickson & Roberts, 1997; Steer & Tiggemann, 2008). Research among college women has supported this reasoning, as components in the self-objectification process (internalization, prioritizing appearance over competence, and body surveillance) have been associated with decreased sexual functioning (e.g., Calogero & Thompson, 2009), including body consciousness during sexual activity (Claudat et al., 2012; Steer & Tiggemann, 2008). Moreover, research has suggested that both internalization and valuing appearance over competence indirectly relate to women's sexuality through body surveillance (Calogero & Thompson, 2009; Tiggemann & Williams, 2012). The second objective of the current study was to test the directionality of the process of self-objectification using longitudinal data from adolescents.

Current Study

Based on prior research on objectification theory (see Moradi & Huang, 2008), we expected that (a) internalization of appearance ideals would predict valuing one's appearance

over competence and body surveillance, (b) valuing one's appearance over competence would predict body surveillance, and (c) valuing one's appearance over competence would partially mediate the relationship between internalization and body surveillance. Because studies among college women (e.g., Tiggemann & Williams, 2012) have found that internalization of appearance ideals, valuing appearance over competence, and body surveillance were directly and indirectly related to body consciousness during sexual activity, we further hypothesized that these factors would predict adolescents' body consciousness during sexual activity over time. Specifically, we expected that the relationship between internalization and body consciousness during sexual activity would be partially mediated by valuing one's appearance over competence and body surveillance and (b) the relationship between valuing one's appearance over competence and body consciousness during sexual activity would be mediated by body surveillance.

By testing this model, we aimed to overcome three limitations of prior research by (a) testing the proposed temporal order of associations among internalization, valuing appearance over competence, body surveillance, and sexual dysfunction (Moradi & Huang, 2008); (b) focusing on adolescents rather than college students—despite indications from qualitative research that sexual objectification affects adolescents' initial sexual experiences (e.g., Bay-Chen et al., 2012), no quantitative study has yet addressed this issue; and (c) exploring whether the strength of these relationships differs between girls and boys, as more frequent exposure to sexual objectification may produce stronger relationships in the model for girls (American Psychological Association, 2010; Moradi & Huang, 2008). We controlled for body mass index (BMI) and age, given that a higher BMI and being older is associated with self-objectification (Harrison & Fredrickson, 2003; Knauss, Paxton, & Alasker, 2008).

Method

Participants and Procedure

Between March 2010 and March 2011, a 3-wave panel study with intervals of six months was conducted with 12-18 year-olds from 12 schools in different regions of Belgium. The institutional review board of the host university approved the study. Informed consent was obtained in accordance with the customary guidelines of Belgium. Students were informed that the study investigated their leisure habits. To increase confidentiality, the researchers ensured that no one would be able to discuss or view students' answers, and requested students to write their identification data on separate forms. After data collection, each respondent was assigned a code to delete identifying data before processing survey answers.

Every student present during school visits at Waves 1 (N = 1,504), 2 (N = 1,426), and 3 (N = 1,433) completed paper surveys; 1,041 respondents were tracked over three waves (69.21% of total). Only the 296 students who had engaged in sexual intercourse by the final wave were included. Of these 296 adolescents, 58 were excluded because they did not fully complete the measures, resulting in a final sample of 238 adolescents (52.1% girls). Most (94.1%) were born in Belgium.

Measures

Covariates. Participants reported their age, height, and weight, which were used to calculate BMI (kg/m^2).

Internalization of appearance ideals. The Internalization-General subscale of the Sociocultural Attitudes Towards Appearance Scale (Thompson et al., 2003) was administered. Respondents used a 5-point scale ranging from *I totally disagree* (1) to *I totally agree* (5) to evaluate its nine items. An average score was calculated; higher scores indicate higher levels of internalization. This subscale has accrued evidence of validity and internal consistency among college women (Thompson et al., 2003). The scale evidenced internal consistency reliability across the different waves (α_{w1} = .88; α_{w2} = .86; α_{w3} = .86).

Valuing appearance over competence. This construct was measured using Vandenbosch and Eggermont's (2012, 2013) adapted version of Noll and Fredrickson's (1998) Self-Objectification Questionnaire. The original scale had participants rank order 12 appearance-based and competence-based body attributes according to importance. However, as respondents often misinterpret the task (Calogero, 2011) and ranking precludes the calculation of Cronbach's alpha, Vandenbosch and Eggermont (2012, 2013) proposed evaluating the importance of each attribute on a 10-point scale ranging from *not at all important* (1) to *very important* (10). This procedure makes it possible to test the theoretically proposed categorization of the attributes as appearance-based and as competence-based. Using this method, Vandenbosch and Eggermont performed a factor analysis and found two factors: one for appearance based items and one for competence based items, which conformed to Noll and Fredrickson's (1998) categorization. The difference between the mean scores of the newly created appearance (Girls α_{w1} = .71; α_{w2} = .74; α_{w3} = .81; Boys α_{w1} = .79; α_{w2} = .82; α_{w3} = .88) and competence-based (Girls α_{w1} = .70; α_{w2} = .79; α_{w3} = .82; Boys α_{w1} = .85; α_{w2} = .88; α_{w3} = .90) factors addressed the estimated level of valuing appearance over competence (ranging from -9 to 9). Higher scores indicate increased valuing of appearance over competence. Evidence for internal consistency and construct validity has been demonstrated among adolescent girls and boys (Vandenbosch & Eggermont, 2012, 2013).

Body surveillance. The Body Surveillance subscale from the Objectified Body Consciousness Scale for Adolescents (Lindberg, Hyde, & McKinley, 2006) was used. On a 5-point scale ranging from *almost never* (1) to *almost always* (5), the respondents evaluated four statements. An average score on the four items was calculated; higher scores indicate higher levels of body surveillance (α_{w1} = .79; α_{w2} = .81; α_{w3} = .84). Evidence for internal consistency, construct validity, and test-retest reliability has been demonstrated among adolescent girls and boys (Lindberg et al., 2006).

Body consciousness during sexual activity. Five items were selected from Wiederman's Image Self-Consciousness Scale (2000) and adapted to focus on adolescents' overall body consciousness during sexual activity. These adaptations ensured that the scale was ethically appropriate for adolescents. The respondents used a 5-point scale ranging from *almost never* (1) to *almost always* (5) to evaluate five statements, e.g., "I felt very nervous when my partner explored my body and touched it everywhere during sex" and "The idea of having sex without any covers over my body causes me anxiety." Because some respondents were not yet sexually active at W1 (n = 98) and W2 (n = 49), we asked them to rate the same items, though, referring in this case to the hypothetical situation of having sexual intercourse. An average score on the five items was calculated; higher scores indicate higher levels of body consciousness during sexual activity. Internal consistency reliability was demonstrated in each wave (α_{w1} = .76; α_{w2} = .77; α_{w3} = .78).

Results

T-test procedures comparing the final sample with students who were sexually experienced but did not participate in W1 and/or W2 or had missing data in W3 showed that the final sample scored significantly lower on body surveillance (M = 2.94, SD = 0.92; M = 3.20, SD = 0.89), $t(444) = 3.04$, $p < .005$. Boys were underrepresented in the analytical sample, $\chi^2(1) = 14.03$, $p < .001$. No other differences were found.

Descriptive statistics for the final sample are presented in Table 1. Additional analyses ensured that neither skewness nor kurtosis was violated (Kline, 2010).

The hypothesized relationships were tested with structural equation modeling (AMOS) using the maximum likelihood method. The model included internalization, body surveillance, and body consciousness during sexual activity as latent variables (scale items were indicators of their respective latent variable; items all loaded significantly on their respective latent variable, $p < .005$) and valuing of appearance over competence , BMI, and

age as manifest variables. We controlled for the baseline values of age and BMI, and previous level of each criterion variable by utilizing them as predictors of the endogenous variables.

Following the guidelines that $\chi^2/df \leq 5$, CFI $\geq .90$, and RMSEA $< .08$ (Byrne, 2010), we considered the fit of the structural model to be adequate, $\chi^2(400) = 743.59$, $p < .001$, $\chi^2/df = 1.86$, CFI = .90, RMSEA = .06. Analyses showed that internalization (W1) predicted valuing appearance over competence (W2) and body surveillance (W2). Valuing appearance over competence (W2) also predicted body surveillance (W2). In turn, body surveillance (W2) predicted body consciousness during sexual activity (W3). Valuing appearance over competence (W2) did not predict body consciousness during sexual activity (W3; $p = .45$), even though the direct relationship between internalization (W1) and body consciousness during sexual activity (W3) was marginally significant ($p = .05$).

By multiplying the indirect standardized path coefficients (Cohen & Cohen, 1983) and on the basis of 500 bootstrapping samples (Arbuckle, 2010), we estimated a 95% bias-corrected confidence interval (CI) for the hypothesized partial mediations. The significance of the direct effect was evaluated to determine partial mediation (significant direct effect) or full mediation (nonsignificant direct effect). Results indicated that the relationship between internalization and body surveillance was partly mediated by valuing appearance over competence (.01 = .09 × .16; CI = .001-.042), the association between internalization and body consciousness during sexual activity was partially mediated by body surveillance (.02 = .12 ×.16; CI = .002-.073), and the relationship from valuing appearance over competence to body consciousness during sexual activity was fully mediated by body surveillance (.03 = .16 ×.16; CI = .001-.084). No other indirect or mediated effects were evidenced.

A multiple groups analysis explored the moderating role of gender by investigating whether the fit of the above-described model, which assumes that the relationships do not vary across gender and are thus constrained to be equal between boys and girls, differs

significantly from the fit of a model that allows the relationships to vary between boys and girls. This analysis revealed that the relationships did not significantly differ between boys and girls, $\chi^2(6) = 7.85$, $p = .25$.

Discussion

Consistent with objectification theory, this study successfully tested a three-step process of self-objectification and its relationship with body consciousness during sexual activity. Three conclusions can be derived. First, our longitudinal data support the structure that has been attributed to the three-step self-objectification process (Vandenbosch & Eggermont, 2012). Second, in line with previous research (Calogero & Thompson, 2009), our results demonstrate that body surveillance directly, and internalization and valuing appearance over competence indirectly, raise adolescents' focus on their appearance when they are involved in sexual activities. Third, the extent to which objectification constructs relate to each other appears to be similar across gender.

The importance of continued research into such an explanatory model for body consciousness during sexual activity is high, as prior literature has stressed its negative consequences in terms of disregarding one's own needs and sexual dissatisfaction (e.g., Steer & Tiggemann, 2008). A question for further research may also be whether self-objectification and body consciousness during sexual activity reinforce each other. If adolescents are preoccupied with an observer's perspective of their body during sex, sexual activity may become a sexually objectifying experience. These adolescents may understand the sexual interest of a partner as a sexually objectifying gaze (Fredrickson & Roberts, 1997), which, in turn, may trigger a process of self-objectification. Future research should explore whether a reinforcing spiral occurs among late adolescents or young adults as a similar model was reported in research on body surveillance and weight-shape concern among Caucasian college women (Fitzsimmons & Bardone-Cone, 2011). Further research may also focus on the

avoidance of sexual contact as a consequence of self-objectification during previous sexual experiences. A similar avoidance of sexualizing media content has already been demonstrated to result from the use of sexually objectifying media (Aubrey, 2006). Lastly, although the emerging line of research on objectification and sexuality has largely neglected male samples (e.g., Calogero & Thompson, 2009), our findings indicate that men's sexuality may also be at risk and thus deserve future attention.

In sum, the current study, which is limited to adolescents in the Western European context, but whose results are consistent with Australian and American research among college students (Moradi & Huang, 2008), highlights how self-objectification may affect adolescents' initial sexual experiences. This pattern places adolescents at risk for being preoccupied with how they appear during sex rather than appreciating how their bodies feel during sex.

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Table 1

Means and Standard Deviations of the Studied Variables

	Min	Max	*M*	*SD*	Age_1	IT_1	IT_2	IT_3	VA_1	VA_2	VA_3	BS_1	BS_2	BS_3	BCS_1	BCS_2	BCS_3
BMI_1	15.04	30.43	20.59	2.41	.12	.03	.03	.09	-.01	-.02	.08	.04	.04	.10	.09	.14*	.13*
Age_1	13.00	18.00	16.29	1.08	1	.10	.10	.08	.20**	.10	.16*	.17**	.13*	.11	.02	.08	.00
IT_1	1	5	2.79	0.78		1	.64**	.55**	.44**	.40**	.43**	.58**	.54**	.47**	.21**	.16*	.24**
IT_2	1	5	2.80	0.70			1	.62**	.39**	.33**	.43**	.49**	.53**	.46**	.18**	.17*	.22**
IT_3	1	5	2.83	0.72				1	.36**	.35**	.40**	.45**	.52**	.52**	.18**	.15*	.24**
VA_1	-9	9	-0.26	1.73					1	.75**	.70**	.48**	.43**	.34**	.20**	.14*	.20**
VA_2	-9	9	0.04	1.67						1	.74**	.47**	.49**	.39**	.19**	.19**	.22**
VA_3	-9	9	0.03	1.68							1	.53**	.52**	.49**	.23**	.26**	.24**
BS_1	1	5	3.30	0.84								1	.78**	.72**	.21**	.27**	.30**
BS_2	1	5	3.22	0.89									1	.76**	.24**	.32**	.33**
BS_3	1	5	3.20	0.89										1	.20**	.24**	.33**
BCS_1	1	5	2.19	0.79											1	.50**	.45**
BCS_2	1	5	2.14	0.79												1	.57**
BCS_3	1	5	2.12	0.75													1

Note.* $p < .05$; ** $p < .01$, IT = Internalization of appearance ideals, VA = Valuing appearance over competence, BS = Body surveillance, and BCS = Body consciousness during sexual activity.

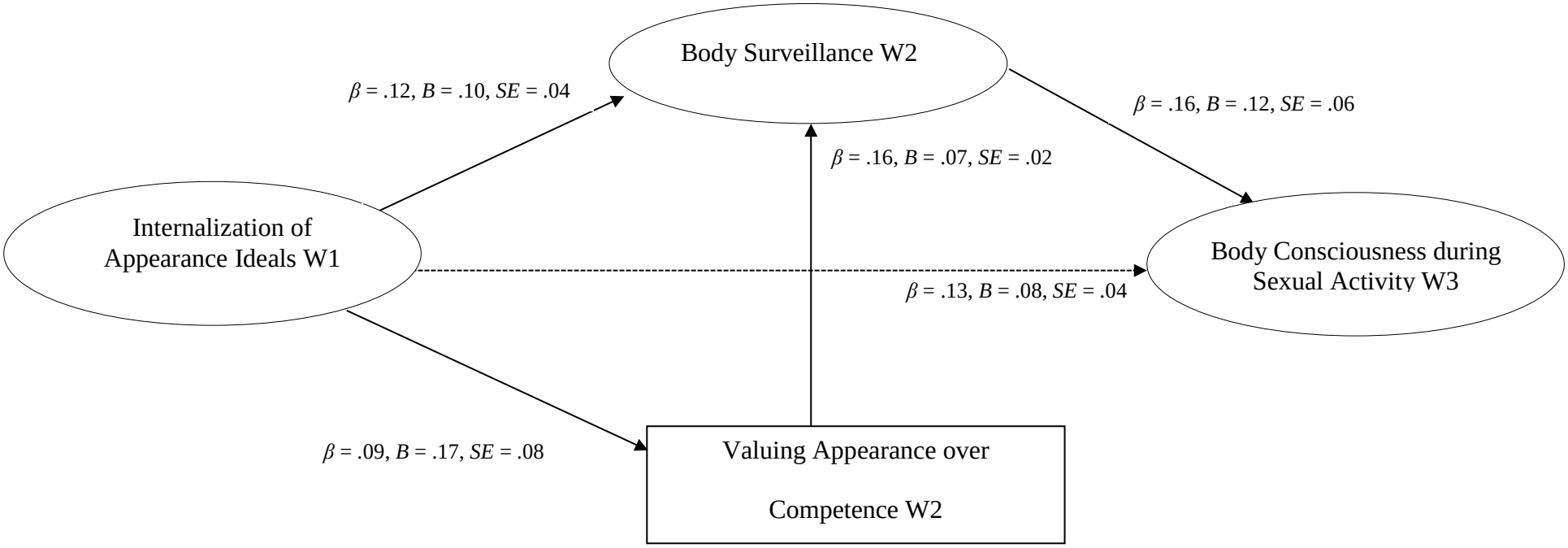

Figure 1. The structural equation model for the hypothesized relationships involving internalization, valuing appearance over competence, body surveillance, and body consciousness during sexual activity. All of the paths are significant at $p < .05$, dotted paths are marginally significant, $p = .05$. For clarity, the error terms, control variables, and measurements are not presented.